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Research Article
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Why the British Government Must Invest in the Next Generation of Intelligence Analysts

Joe Devanny, Robert Dover, Michael S Goodman and David Omand

In this article, Joe Devanny, Robert Dover, Michael S Goodman and David Omand explore the current problems facing intelligence analysis and analysts in the UK and consider what might be done to tackle them. They argue that nothing less than a revolution in the British government's approach to intelligence assessment is required and that this ought to take the form of a School of Intelligence Assessment within a properly financed and structured National Security Academy.

The last decade has presented a formidable array of national security challenges: a global financial crisis; the 2011 Arab uprising and the ongoing conflict in Syria; Russian military attacks on Georgia (2008) and Ukraine (2014), and almost certainly the Russian use of a chemical weapon in the UK (2018); the persistence of the international terrorist threat, in mutating forms; and the increasing salience of 'cyber' as a significant vector of threat to a wide variety of vulnerable targets.

The UK has tried to respond to these evolving threats in a structured and strategic manner. Since the first publication of a formal national security strategy (NSS) in March 2008,[1] the UK has seen three further iterations of the NSS in 2009,[2] 2010[3] and 2015[4] – the last two aligned or combined with strategic defence and security reviews (SDSR) – as well as reforms of national security coordination.[5] The central argument that runs through each iteration of the NSS is simple but not straightforward and has far-reaching implications: does the government have the resources to make sense of the complex, dynamic and uncertain world we live in?

This article goes beyond previous efforts to analyse the underlying investment in national security and its component parts (including defence, diplomacy, intelligence and security) to focus on the central role of intelligence assessment in national security decision-making – and argues for nothing less than a revolution in the British government's approach to intelligence assessment. The authors consider it therefore both significant and encouraging that the post of Professional Head of Intelligence Assessment (PHIA) in the Cabinet Office has recently been recreated at 2* (Director)

1. HM Government, *The National Security Strategy of the United Kingdom: Security in an Interdependent World*, Cm 7291 (London: The Stationery Office, March 2008).
2. HM Government, *The National Security Strategy of the United Kingdom: Update 2009: Security for the Next Generation*, Cm 7590 (London: The Stationery Office, June 2009).
3. HM Government, *A Strong Britain in an Age of Uncertainty: The National Security Strategy*, Cm 7953 (London: The Stationery Office, October 2010).
4. HM Government, *National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom*, Cm 9161 (London: The Stationery Office, November 2015).
5. Joe Devanny, 'Co-ordinating UK Foreign and Security Policy: The National Security Council', *RUSI Journal* (Vol. 160, No. 6, 2015), pp. 20–26.

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The entrance to the Cabinet Office at 70 Whitehall, London, UK. *Courtesy of Wikipedia*

level as a focus for re-examining the nature and breadth of the profession of intelligence analysis and its training needs, and therefore could provide a focus for unifying standards for intelligence education.

This is a step in the right direction, but the government can go further, and faster. The British government must finally accept that there is a clear requirement for investing in and resourcing an intelligence assessment community that meets the needs of a 'Global Britain', as described in the March 2018 'National Security Capability Review' (NSCR).[6] This lengthy study reviews and endorses the priority to be given to countering the threats identified in the 2015 NSS/SDSR. Prominent among them are the combination of the resurgence of state-based threats and increasing competition between states; the undermining of the international rules-based order; and the rise in cyber attacks from both state and non-state actors.[7] These challenges are predicted to continue to intensify and evolve. Their increasingly complex and intertwined nature is said now to require a more effective whole-of-government approach, underpinned by robust intelligence assessment, under the new national security 'Fusion Doctrine'.[8]

The challenge in providing intelligence support, both strategic and tactical analysis, and assessment, for such an agenda is only partially recognised in the NSCR. In the context of widespread government austerity, there is provision for growth in the Single Intelligence Account (SIA) budget of 18% in real terms.[9] The 2015 NSS/SDSR also committed to the recruitment of more than 1,900 additional intelligence officers across Government Communications Headquarters (GCHQ), the Security Service (MI5) and the Secret Intelligence Service (SIS, or MI6) – together colloquially known as the UK Intelligence Community (UKIC).[10] The National Crime Agency (NCA), an intelligence-led law enforcement agency responsible for addressing the threat of serious and organised crime, is also on

6. HM Government, 'National Security Capability Review', March 2018, pp. 7–8.
7. *Ibid.*, pp. 5–6.
8. *Ibid.*, pp. 10–11.
9. *Ibid.*, p. 9.
10. HM Government, *National Security Strategy and Strategic Defence and Security Review 2015*, p. 24.

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a recruitment drive for investigators and intelligence analysts.[11]

However, it should be noted that while the UKIC budget has increased since 2010, investment in the intelligence assessment community had largely remained flat in real terms for much of the past decade, even as the number of intelligence requirements increased.[12] There is some concern that the gap between intelligence collection and intelligence assessment has become a systemic risk, in the sense of the disconnect between a sustained investment in collection that has not been directly mirrored by a proportionate investment in the size, scope and capability of assessment.[13] An example of the government's own efforts to address this gap is its commitment to lift the Joint Intelligence Organisation's (JIO) budget from around £3.5 million in 2016 to £5.2 million by 2020/21. The latest publicly available information indicates that 80% of the JIO's staff are in operational roles as assessment officers, equating to around 60 officers, a cohort larger than the entire JIO staff in 2016.[14] This number is, of course, still dwarfed by the more than 12,000 staff employed (as of 2016, the number has subsequently increased) in the UKIC – a significant percentage of whom focus directly on intelligence collection.[15] International comparisons are also instructive: Australia, with an intelligence community roughly half the size of UKIC, employs around 138 officers in its JIO-equivalent body, the Office of National Assessments (ONA), with an independent review in 2017 describing even that figure as a 'relatively small base', recommending an increase of 50% to address the increasing number of requirements facing the Australian intelligence community.[16]

Numbers only tell part of the story; capabilities matter too. The most recent annual report of the Intelligence and Security Committee of Parliament quotes the then acting chairman of the Joint Intelligence Committee conceding that, by the middle of this decade, the Assessment Staff had become under-funded, under-staffed relative to priorities, and was 'no longer at the cutting edge of where we should be'.[17] The UK needs, therefore, to think carefully about how its assessment capabilities can be improved.

The JIO is tasked with implementing recommendations to improve and standardise working practices across the assessment community, aiming to enable a more rigorous approach to producing assessments that inform national security policy and decision-making. And there are other specific intelligence challenges identified in the NSCR, including delivering the support to enable the planned Joint Force to be more versatile and agile; the integration of the knowledge and expertise held by all the border organisations to produce comprehensive strategic threat assessments for the border (important for the post-Brexit environment); a new intelligence framework for serious and organised crime; and measures to improve disruption of terrorist plots in their early stages.[18]

Taken together, these add up to a major challenge for the development, training and education of the UK intelligence assessment community, not just in the JIO, Defence Intelligence (DI) and the national intelligence collection agencies, but also for the analysts involved in the many departments and agencies that are to be instrumental in implementing the Fusion Doctrine, and which may have only limited prior experience of working with government intelligence agencies. Those working as analysts in Britain's intelligence community

11. The NCA is itself a product of this decade of national security reforms. It was announced in 2011 (operational from 2013) as the successor to the Serious Organised Crime Agency, which was conceived in 2005 and operational from 2006.
12. Requirements are agreed annually in May or June by the National Security Council, as part of the Intelligence Coverage and Effects Plan, a cross-government process coordinated by the Cabinet Office National Security Secretariat between January and April each year.
13. See, for example, Mark Townsend, 'How a Crippling Shortage of Analysts Let the London Bridge Attackers Through', *The Guardian*, 11 June 2017.
14. Intelligence and Security Committee of Parliament, *Intelligence and Security Committee of Parliament Annual Report 2016-2017*, HC 655, 20 December 2017, pp. 102–03.
15. SIA staff figures, at 31 March 2016, from the *Intelligence and Security Committee of Parliament Annual Report 2017-2018*, comprising: 4,053 staff in the Security Service (p. 72); 2,594 in the Secret Intelligence Service (p. 77); and 5,806 in GCHQ (p. 84).
16. Commonwealth of Australia, *2017 Independent Intelligence Review* (Canberra: Department of the Prime Minister and Cabinet, June 2017), p. 68.
17. Intelligence and Security Committee of Parliament, *ISC Annual Report 2016-2017*, pp. 103–04.
18. UK Government, 'National Security Capability Review': Joint Force (pp. 14–17); border organisations (pp. 26–27); serious and organised crime (pp. 23–25); and counterterrorism (pp. 18–20).

need to behave with the status of a profession, with a code of ethics and common legal standards, promoting best practice and ensuring that analysts can keep up to date with developments in the field and outside, not least in information sciences and artificial intelligence (AI). The formal creation of intelligence analysis as one of the 28 civil service professions is an important step, but this needs to be followed through with a sense of momentum and series of initiatives to foster a real sense of shared professional identity for intelligence analysts working across government.

The authors consider that this will only be possible by giving this profession a physical embodiment through creating a School of Intelligence Assessment, building upon the still embryonic virtual National Security Academy (vNSA)[19] and most probably located (institutionally if not physically) in the Cabinet Office. Such a school would deliver training itself – not least a Junior, Intermediate and Senior Analyst Programme as the backbone of wider analytic education, including the creation and nurturing of career pathways. By providing a clear focal point for analytical training and education across the whole profession, the school could also usefully remove the barriers that currently exist to the effective mobilisation of those outside the intelligence community in academia and the private sector, enabling analysts from all agencies and departments to tap into their deep subject-matter, methodological and theoretical expertise as part of a coherent, shared curriculum.[20] An example of the value of such collaboration is the work undertaken by one of this article's authors to assist the NCA with its professionalisation and internationalisation agenda.[21] The school would also be a natural focus for fruitful exchanges with international allies and partners, themselves facing the same need for transformation, as discussed in the 'Developments Overseas' section of this article.

Development of the Profession of Analysis

Historically, there was no need for a separate profession of intelligence analysts. Robert Cecil, the key policymaker for Queen Elizabeth I, was perfectly capable of assessing himself the secret intelligence brought to him by Walsingham's spy network. During the 19th and 20th Centuries, however, the increasing scale and complexity of the intelligence challenge required a greater specialisation of analytical effort.

The development of the UK Joint Intelligence Committee (JIC) from its beginnings in 1936 required a new breed of analysts able to conduct strategic assessments across the whole field of defence, security and foreign policy.[22] Study of the Soviet Union heightened the need for area and linguistic specialists, in addition to economic intelligence analysts, and greater analytic expertise in nuclear, chemical and biological weapons and advanced conventional weaponry.

More recently, specialist analysts (including in the UK's Joint Terrorism Analysis Centre) conduct analysis into and assessment of international terrorist networks and radicalised individuals. The NCA and the Metropolitan Police use national intelligence to investigate serious and organised crime, including detecting child abuse, modern slavery and people-smuggling networks, and local police forces use the national policing intelligence model against 'volume crimes'.[23] New analytic specialisations studying intelligence on international financial movements, cryptocurrencies, social security fraud and tax evasion have developed.

19. The 2015 NSS/SDSR announced (p. 84): 'We will establish a virtual National Security Academy which will act as a hub ... to share, develop and maintain critical knowledge and skills across the national security community, leading to greater coherence and common professional standards'. The 2018 NSCR subsequently described (p. 49) the creation of the NSA as an '[i]n progress or ongoing' objective, describing its new 'primary focus' as the provision of training in the Fusion Doctrine (p. 11). For further treatment of the NSA in this article, see the 'Professionalising Intelligence Assessment' section.
20. Robert Dover and Michael S Goodman, 'Impactful Scholarship in Intelligence: A Public Policy Challenge', *British Politics* (Vol. 13, No. 3, 2018), pp. 374–91; see also Philip H J Davies, 'Assessment BASE: Simulating National Intelligence Assessment in a Graduate Course', *International Journal of Intelligence and CounterIntelligence* (Vol. 19, No. 4, 2016), pp. 721–36.
21. University of Leicester, 'Highest Recognition from the National Crime Agency for Intelligence Expert', press release, 1 August 2018.
22. See Michael S Goodman, *The Official History of the Joint Intelligence Committee: Volume 1: From the Approach of the Second World War to the Suez Crisis* (Abingdon and New York, NY: Routledge, 2014).
23. Volume crime 'is any crime which, through its sheer volume, has a significant impact on the community and the ability of the local police force to tackle it'. See National Police Improvement Agency, 'Practice Advice on The Management of Priority and Volume Crime (The Volume Crime Management Model)', Second Edition, 2009, p. 8.

The internet now provides a gateway to an ever-expanding quantity of open-source data (including from social media platforms) that has become seen by all analysts as an important complement to secret sources, but which requires specialist technical training to exploit to the full.[24] For the future, current developments in data science and various forms of AI seem set to become part of the working toolset of many analysts. There is so much information that it requires specially trained analysts applying advanced algorithms to separate the signals from the noise, to discern the insights from the hindsight.[25] The future is no longer merely about ensuring the capture of adequate quantities of data but – more particularly – the challenge of processing, storing and analysing these vast quantities of data.[26]

From this, three conclusions can be drawn. The first is that the increasing specialisation in intelligence assessment is a historical trend that will continue to develop and deepen.[27] This threatens to undermine current efforts within the civil service to draw together a single profession of all-source intelligence analysts.[28] This needs to be consciously managed by ensuring that analysts of different specialisations and from different organisations have ways of professionally meeting, to be aware of the developments in each other's areas and to co-produce new techniques and cross-pollinate between disciplines. This can be described as 'social learning' and has been proven to provide strong added value to those engaged in international military education, and also to have the tangential benefit of reducing transnational misunderstandings about developments in the field.[29]

The second conclusion is that digital technology (and its legal and oversight environment) will exert an even greater impact in future on analysts than it has already, and there is therefore a need to ensure that those on the cutting edge outside the civil service, in private industry or academia, are able to communicate developments across the secure boundaries of the profession.

The third conclusion returns to Robert Cecil: today's policymakers cannot now hope to emulate his one-man approach and undertake their own intelligence assessments. There is simply too much information, regarding too many targets, derived from such a delicate skein of sources and methods that its proper interpretation and assessment must itself be a specialised task.

Professionalising Intelligence Assessment

The first efforts to 'professionalise' intelligence assessment in the UK took place in 1968 at a time when the analytical component of Britain's intelligence community was going through major reorganisation. The desire to improve professionalisation was not restricted to the sphere of intelligence: 1968 also saw the Fulton Report criticise the cult of the amateur or generalist within the wider civil service.[30] Part of the stimulus then was the changing world and Britain's future role. Regarding intelligence assessment, partly it was also to do with improving the quality of the analytic product, particularly at a time when it was perceived that collection efforts would become increasingly hampered. The point, according to one of the architects of this reform, the then Cabinet Secretary Burke Trend, was to 'introduce a greater degree of objective "professionalism" into our handling of intelligence'.[31] Part of the answer was to create the Assessments Staff within the Cabinet Office JIC structure. Not only was this a question of appointing

24. For a concise statement of the problem of integrating open-source data in intelligence analysis, see Stephen C Mercado, 'Sailing the Sea of OSINT in the Information Age: A Venerable Source in a New Era', *Studies in Intelligence* (Vol. 48, No. 3), Centre for the Study of Intelligence, 2004.
25. IBM Marketing Cloud, '10 Key Marketing Trends for 2017 and Ideas for Exceeding Customer Expectations', <https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=WRL12345USEN>, accessed 19 November 2018.
26. Nate Silver, *The Signal and the Noise: The Art and Science of Prediction* (London: Penguin, 2013).
27. For background, see Julian Richards, *The Art and Science of Intelligence Analysis* (New York, NY: Oxford University Press, 2010).
28. Although many UKIC officials are crown servants rather than civil servants, where they and other non-civil servants in the wider public sector occupy intelligence analysis roles it would be sensible for them to be brought into the closest possible alignment with the civil service profession of intelligence analysis.
29. See Albert Bandura, *Social Learning Theory* (London: Prentice Hall, 1977). See also Sergio Catignani, 'Coping with Knowledge: Organizational Learning in the British Army?', *Journal of Strategic Studies* (Vol. 37, No. 1, 2014), pp. 30–64.
30. Fulton Committee, *The Report of the Committee on the Civil Service*, Cmnd. 3638 (London: The Stationery Office, June 1968).
31. John W Young, 'The Wilson Government's Reform of Intelligence Coordination, 1967-68', *Intelligence and National Security* (Vol. 16, No. 2, 2001), pp. 133–51.

the right people to staff it, but of engaging broadly across government and outside it:

> The requirement was for literate, relevant and up-to-date studies of trends of longer-term significance which would command the attention of those responsible for the formulation of policy. These should be produced by drawing fully upon the sources of Whitehall Departments and, where necessary, on those of the outside world. The staff should be regarded as a species of dynamo producing long-term papers with substantial impact. The task and scope were considerable: while the staff need not be large and should avoid being top heavy, it would need to be composed of first-class men who were skilled drafters and active at seeking the necessary information.[32]

Questions of gender aside, this quotation reveals one of the longest running questions that underpin the professionalisation of analysts: can a well-educated, intelligent person be trained to become a great analyst (and more fundamentally, can agreement ever be reached on what defines a great analyst?), or are there special characteristics that need to be talent spotted at the recruitment stage? Certainly, those who have written about training analysts cannot agree on an answer, but many international agencies seek to sift trainees for temperament and early technical skill to try and improve the chances of moulding successful analysts.[33]

The 1968 creation of the Assessments Staff was certainly successful: it remains in existence today and has changed remarkably little in concept despite repeated examination of the Australian ONA model based on transfer into the Cabinet Office (and into the SIA) of all-source analysts from Defence Intelligence.

The idea of professionalising analysts returned with the findings of Lord Butler's 2004 'Review of Intelligence on Weapons of Mass Destruction' that identified the need for systematic 'challenge' to intelligence assessments of threats and opportunities and engagement with the wider community of relevant outside experts,[34] a call repeated by the Report of the Iraq Inquiry (Chilcot Report) in terms of policy analysis as well as intelligence assessments.[35]

It is arguable whether that need has yet been met across the civil service in terms of the prevailing culture. While there will always be some barriers, for example an analyst's time to engage, the requirement to vet and clear those outside the community, and the need for information security, the intelligence assessment community has made great strides in the past few years. There is now a regular diet of external engagement across the intelligence assessment community, with analysts keen to ensure they have a broad understanding of an issue and that they are being regularly challenged – not least to ensure they are not victims of 'groupthink' – a point made recently by Alex Younger, the chief of SIS, about the need to 'stimulate a contrary view'.[36]

One post-Butler construction, adopted in 2005, is the Cabinet Office post of PHIA. The first incumbent, Jane Knight, was a civilian appointed at the level of a 2* and was responsible for promoting the idea of greater professionalisation in assessment and to engender a sense of profession. A small team was established under the PHIA with a remit including providing advice and supervision of cross-community analytical capacity and capabilities, methodology and training. One significant achievement has been the addition of intelligence analyst to the list of civil service professions and the emerging development of degree apprenticeships to support the profession.[37] The effect of this has been to strengthen training and engagement across the intelligence community.

The concept of an analytic profession was nevertheless a big change for the intelligence

32. See MISC 155(67), 1st Meeting, 'Intelligence: Interdepartmental Committee Structure', 29 June 1967. The National Archives (Kew): CAB 163/124. There will be more detail on these changes and the background to them in the second volume of Michael S Goodman, *The Official History of the Joint Intelligence Committee* (forthcoming).
33. For a European approach, see José-Miguel Palacios, 'Intelligence Analysis Training: A European Perspective', *International Journal of Intelligence, Security, and Public Affairs* (Vol. 18, No. 1, 2016), pp. 34–56.
34. Robin Butler, 'Review of Intelligence on Weapons of Mass Destruction', HC898, 14 July 2004, <http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/14_07_04_butler.pdf>, accessed 19 November 2018.
35. House of Commons, *The Report of the Iraq Inquiry: Report of a Committee of Privy Counsellors (HC 264)* (London: The Stationery Office, 6 July 2016), <https://webarchive.nationalarchives.gov.uk/20171123122743/http://www.iraqinquiry.org.uk/the-report/>, accessed 19 November 2018. It is perhaps worth noting that the chairman of the Iraq Inquiry, Sir John Chilcot, was previously a member of Lord Butler's 2004 inquiry.
36. Cited in Ewen MacAskill, 'Hostile States Pose "Fundamental Threat" to Europe, Says MI6 Chief', *The Guardian*, 8 December 2016.
37. On these more broadly see HM Government, 'Working for the Civil Service', <https://www.gov.uk/government/organisations/civil-service/about/recruitment#professions>, accessed 8 July 2018.

community, with the traditionally siloed approach to the pursuit of a career within one department meaning that there has been less cross-pollination from career moves between agencies than there might otherwise have been, and with the agencies tending to see their intelligence officers as cycling through operational, analytic and administrative functions as part of a full career rather than being recruited as career analysts. Perhaps unsurprisingly, it was also initially difficult to see many tangible results from being called a profession – and some critics feared a loss of momentum following Knight's retirement in August 2007, which resulted in a long period during which the professionalisation agenda appeared to lack a senior champion.

It is inherent in any bureaucratic structure that in the absence of vigorous and enlightened central leadership, agencies and departments will tend to go their own way. Even *with* vigorous central leadership, agencies often need to be convinced of the value of central coordination and standardisation. At the centre, there is a need for recognition that, despite advances in joint working within the UKIC, it can be difficult for the representatives of individual agencies and departments to adopt the perspective of the whole profession when they are faced with the responsibility to preserve the equities of a specific institution.

And there is no shortage of institutional equities: the scope of those that might in the light of the NSS be regarded as part of the intelligence analysis profession has significantly widened in recent years, given the use of secret intelligence by departments such as the Department for Work and Pensions, HM Revenue and Customs and the Department for International Development, together with a range of border and law enforcement bodies including the NCA and Counter Terrorism Command (SO15), in addition to departments such as the Foreign and Commonwealth Office (FCO), HM Treasury and the Home Office, which are traditionally represented on the JIC. This proliferation of institutional stakeholders highlights the requirement for effective central coordination, to shepherd the definition and development of the intelligence assessment profession and to take responsibility for its health.

In the 2018 NSCR, there are two brief mentions of a vNSA.[38] The review noted that the vNSA was '[i]n progress or ongoing' and that its primary focus would be training on the Fusion Doctrine.[39] These brief references owe their origin to the 2015 NSS/SDSR:

> Our ability to implement and deliver our vision is underpinned by the knowledge and skills of our people. We intend to take a more strategic shared approach across government, including by ensuring our education and training establishments work more closely together. These include the Diplomatic Academy, the Defence Academy, the Emergency Planning College and the College of Policing. **We will establish a virtual National Security Academy** which will act as a hub for these organisations to share, develop and maintain critical knowledge and skills across the national security community, leading to greater coherence and common professional standards.[40]

Potentially of great importance to the intelligence analytic profession, the NSA has frankly made slow progress. Be that as it may, this was neither what the original concept had in mind nor what the requirements in central government called for, including doing more to recognise that academia, in particular, has something to offer the intelligence community. While the UKIC and DI have reached out to small segments of higher education for research and education over time, and the FCO has created a Knowledge Exchange Fellowship Scheme to bring academic expertise into the department, there is an absence of coordination or standards-setting to these efforts. This has been replicated in law enforcement intelligence, which is increasingly playing a role in national security, via counterterrorism, countering the logistic lines of terrorism and other forms of organised criminality and subversion.[41] These efforts to professionalise law enforcement intelligence have seen the development of a Level 4 (first-year undergraduate level) apprenticeship in Intelligence Operations, which aims to be an introductory course for all the law enforcement and related non-core intelligence agencies – and indeed has since been adopted by the British Army and RAF for their respective junior analysts.[42] Because

38. HMG, *National Security Capability Review*, pp. 11 and 51.
39. *Ibid*., p. 49.
40. HM Government, *National Security Strategy and Strategic Defence and Security Review 2015*, p. 84. Emphasis in original.
41. See, for example, HM Government, *CONTEST: The United Kingdom's Strategy for Countering Terrorism*, Cm 9608 (London: The Stationery Office, June 2018); and the National Crime Agency, 'National Strategic Assessment of Serious and Organised Crime 2018', 13 May 2018.
42. For more information, see Find Apprenticeship Training, 'Intelligence Operations', <https://findapprenticeshiptraining.sfa.bis.gov.uk/Apprenticeship/Framework/637-20-1>, accessed 6 August 2018.

of its level, however, it can only be viewed in lowest-common-denominator terms, the same being the case for the Police Constables apprenticeship, which contains intelligence components, but in relatively small quantities.[43]

For high-end law enforcement intelligence units, the challenge is to find forms of education and training that match up to the standards of the UKIC and also of international partners who – in the Anglosphere – typically expect education and training to postgraduate level. The Government Intelligence Analyst Training (GIAT) course sees analysts complete modules to work towards a City and Guilds qualification in Intelligence Analysis. The GIAT and its sister course in Defence Intelligence (currently known as the Defence Intelligence Analyst Module) are run nearly 30 times per year, demonstrating a clear demand for training, but it remains true that the absence of agreed or centralised standards for intelligence education – in PHIA, the College of Policing, the Ministry of Defence, Home Office or FCO – is a significant shortcoming and vulnerability for the Fusion Doctrine. In the authors' view, this should be a priority for PHIA in the run-up to the next government spending review.

Similarly, as military educators discovered well over a decade ago, there is a sensitive balance between training (in terms of development of skills) and education (in terms of development of an individual's knowledge base and critical reasoning abilities). Sophisticated actors, depended upon to show good judgement, require both skills and knowledge: it is a requirement that transcends traditional professional development and university programmes, and requires employers to take risks concerning non-measurable benefits and creating longer spaces between classes to ensure that learning outcomes are not undermined by trying to cram too much into one programme (the benefits of so-called 'soak time'), but it is one that the apprenticeships' initiatives are driving towards.

Developments Overseas

The UK does not, of course, confront the challenge of improving analytical training and education in a vacuum or from a standing start. There are, for example, opportunities for the UKIC to build on existing efforts to benefit from expertise in the UK-based commercial sector and academia.[44] Increasing professionalisation of intelligence assessment is, therefore, not only consistent with the direction of travel of the British past, but also an opportunity to learn from and build on the experience of other sectors – as well as from developments in several other national intelligence communities.

Given the close links between the UK and US intelligence communities through the UKUSA Agreement (also known as the Five Eyes),[45] it is worth starting any comparison of national cases with consideration of the US example, which provides an interesting counterpoint to contemporaneous developments in the UK.

Debates about the analytical profession and how to improve it have a distinguished pedigree in the US, for example in the writings of Sherman Kent and Roger Hilsman in the mid-20th Century, and in more recent decades Jack Davis, Richards J Heuer Jr, Gregory F Treverton, and several others.[46] The vibrancy of the US literature – much of it written by intelligence practitioners or former practitioners – is mirrored in the variety of provision of intelligence training and education, for example in the university sector, as well as in reforms of analytic practice within the US intelligence community (USIC). For example, the National Intelligence University is a

43. For more information, see College of Policing, 'Policing Education Qualifications Framework (PEQF)', <http://www.college.police.uk/What-we-do/Learning/Policing-Education-Qualifications-Framework/Pages/Policing-Education-Qualifications-Framework.aspx>, accessed 6 August 2018.
44. In addition to the private sector, examples of UK universities with relevant expertise and existing programmes of teaching include: Brunel; Buckingham; King's College London; Leicester; and University College London.
45. The UKUSA agreement dates to March 1946, and was originally known as the Britain-United States (BRUSA) Agreement. See Richard Norton-Taylor, 'Not So Secret: Deal at the Heart of UK-US Intelligence', *The Guardian*, 25 June 2010.
46. See, for example, Sherman Kent, *Strategic Intelligence for American World Policy* (Princeton: Princeton University Press, 1949); Roger Hilsman, *Strategic Intelligence and National Decisions* (Glencoe: The Free Press, 1956); Jack Davis, *The Challenge of Opportunity Analysis: An Intelligence Monograph* (CIA: Center for the Study of Intelligence, 1992); Richards J Heuer Jr, *The Psychology of Intelligence Analysis* (CIA: Center for the Study of Intelligence, 1999); and Gregory F Treverton, *Intelligence for an Age of Terror* (RAND: Cambridge University Press, 2009). For a collection of essays, including contributions by Jack Davis and Richards Heuer, see Roger Z George and James B Bruce (eds), *Analyzing Intelligence: Origins, Obstacles, and Innovations* (Washington, DC: Georgetown University Press, 2008). See also Stephen Marrin, *Improving Intelligence Analysis: Bridging the Gap Between Scholarship and Practice* (London: Routledge, 2011).

federally chartered university under the Director of National Intelligence. It continues to provide undergraduate and graduate study in subjects central to the profession of intelligence and national security.[47] Research fellowships prepare personnel for senior positions in the USIC, including the ability to research topics at Top Secret/Special Compartmented Intelligence levels.

The current state of analytic training and education in the US is the result of several decades of reform and response to external events. From the mid-to-late 1990s, there has been increasing recognition within the US government of the need to improve USIC analytic practices, training and career pathways, as well as the need for that community to become more open to learning from outsiders' expertise, for example in academia and business.[48]

Perhaps inevitably, and in a way that closely mirrors the UK's experience of intelligence reforms following the Falkland Islands Review (better known as the Franks Report)[49] and its post-Iraq War equivalent, the Butler Report, part of the impetus for this period of US reform, came from reports commissioned in the wake of perceived analytical failures. For example, one consequence of India's nuclear tests in 1998 was an independent review, urgently commissioned by then CIA director George J Tenet and led by a retired admiral and former vice chairman of the Joint Chiefs of Staff, David E Jeremiah, into the intelligence failures that contributed to US policymakers' surprise at the Indian tests.[50]

In addition to recommendations about improving the management and organisation of the wider USIC,[51] the Jeremiah Report recommended better coordination and integration of analytical expertise contained in different agencies and departments, as well as improvements in analytical training; it also recommended that the intelligence community should bring in 'outside substantive experts in a more systematic fashion' and particularly so when the community 'faces a transition on a major intelligence issue'. These supplementary analysts 'would serve, together with substantive specialists, as "Red Teams" on major analytic problems and work with analysts to study assumptions, mirror-imaging, and complex analytic processes'.[52]

The Jeremiah Report's recommendations therefore underline the potential value to the intelligence community of increased openness to non-governmental expertise, not least as a means of keeping governmental analysis up-to-date and inoculated against overly entrenched in-house consensus or mindset biases.[53] The approaches and structures introduced in this period, such as the CIA's Sherman Kent School for Intelligence Analysis, and its senior analytical service (providing a progressive career pathway for analysts), soon received another spur for reform after the terrorist attacks of 9/11.[54]

Over this period, the USIC encountered several of the same drivers for reform as those faced by the UK, but as compared with the intensity, plurality and sheer scale of the USIC response, the post-Butler experience of the PHIA initiative and other departmental advances in professional training represent a more modest, incremental step towards wider analytic reform. In light of the US comparison, it is perhaps natural to wonder whether the UK could benefit from emulating the scale of the USIC's ambition, as well as its commendable openness to alternative approaches and its similar commitment to greater transparency, both of which were, for example, evident in its funding and publishing of Rob Johnston's insightful ethnographic research into the US analytic community in the early 2000s.[55]

47. For a general overview, see the National Intelligence University, <http://ni-u.edu/wp/academics/degrees/>, accessed 19 November 2018.
48. See, for example, Gregory F Treverton, *Reshaping National Intelligence for an Age of Information* (Cambridge: Cambridge University Press, 2001).
49. The Franks Committee, *Falkland Islands Review: A Report of a Committee of Privy Counsellors*, January 1983.
50. While the full text of the Jeremiah Report remains classified, a summary of its recommendations has been declassified by the CIA. See Director of Central Intelligence, 'Recommendations of the Jeremiah Report', June 1998, <https://nsarchive2.gwu.edu//NSAEBB/NSAEBB187/IN38.pdf>, accessed 19 November 2018.
51. Walter Pincus, 'Spy Agencies Faulted for Missing Indian Tests', *Washington Post*, 3 June 1998.
52. See Director of Central Intelligence, 'Recommendations of the Jeremiah Report', June 1998, <https://nsarchive2.gwu.edu//NSAEBB/NSAEBB187/IN38.pdf>, accessed 19 November 2018.
53. See Richard A Best Jr, 'U.S. Intelligence and India's Nuclear Tests: Lessons Learned', Congressional Research Service, 11 August 1998.
54. This period of analytical reform in the US intelligence community is well summarised in Marrin, *Improving Intelligence Analysis*, pp. 77–99.
55. Rob Johnston, *Analytic Culture in the US Intelligence Community: An Ethnographic Study* (Washington, DC: Center for the Study of Intelligence, 2005).

Turning briefly to several other national intelligence communities and what the UK can learn from the diversity of comparative cases, the German Federal Ministry of Defence, in collaboration with the Federal Intelligence Service, will launch in 2019 a new MA/MSc degree programme in Intelligence and Security Studies, in conjunction with the Federal University of Public Administration and the Bundeswehr University in Munich.[56] It is a two-year, full-time, multi-disciplinary programme with content ranging from law, psychology, political science, history and sociology, to informatics, economics, culture and media studies. Of its various aims, the first is the 'professionalisation of intelligence education' and, although it is predominantly a defence and military enterprise, the longer-term aim is for this initiative to enhance professionalisation across the wider federal intelligence community. To support this, the relevant authorities are in the process of recruiting outside academics, to whom the programme can issue appropriate security clearances to teach on the course.[57]

In France, a similar approach has recently been approved. While there has been an intelligence academy (l'académie du renseignement) since 2010, it is shortly to start offering undergraduate and postgraduate degrees to intelligence community personnel. As its director, François Chambon, recently commented, 'not only do agents need to know about subjects like law, political science and history, they also need to be familiar with cognitive sciences like anthropology and social sciences'.[58] More broadly, the French intelligence community is extending its links to academia, unheard of 10 years ago.

In Norway, similar moves have already taken place, with an undergraduate degree offered since 2013 to those working in the intelligence community writ large (both producers and consumers). This complements a longer-standing postgraduate programme, although the newer course offers an actual degree rather than the opportunity to attend courses. The undergraduate course is split into four modules taught by outsiders, with a heavy emphasis on history and political science, and complemented by a number of modules run by Norwegian intelligence officials.[59]

The value of academia to the intelligence community therefore transcends subject-matter expertise. Borne out of the Butler Report's recommendations that government analysts needed further training, specialisation and a career structure,[60] in 2006 King's College London collaborated with the Cabinet Office to create the King's Intelligence Studies Programme.[61] This was and is an innovative course, designed to bring together analysts from across the British intelligence community (and now law enforcement) to learn about issues relevant to their community and to be introduced to scholarship in intelligence studies. In the 12 years since it was created, well over 600 people from across the breadth and depth of government have passed the course. Today those completing it gain MA credits, which can be used towards any degree within the Erasmus scheme.[62] With this background in merging academia and intelligence, it is no surprise that the European intelligence communities and countries referred to above have borrowed heavily (both in terms of personnel and content) from previous UK experience.

Conclusions

Governments have long benefited from intelligence communities to help them avoid unwelcome surprises and to make better decisions. The task of intelligence is to tell it as it is and reduce the ignorance of the decision-maker: to find out what is happening, to explain why that is, and to forecast (as well as they are able in conditions of uncertainty) how things might develop in the future.[63] Over the

56. See Bundeswehr University Munich, 'Master Intelligence and Security Studies', <https://www.unibw.de/ciss/miss/miss_en>, accessed 19 November 2018.
57. Marc Felix Serrao, 'Die neue Schule der Spione', *Neue Zürcher Zeitung*, 18 November 2017.
58. Adam Sage, 'French Secret Services to be Offered Degree in Spying', *The Times*, 21 June 2018.
59. Huw Dylan et al., 'The Way of the Norse Ravens: Merging Profession and Academe in Norwegian National Intelligence Higher Education', *Intelligence and National Security* (Vol. 32, No. 7, 2017), pp. 944–60.
60. Butler, *Review of Intelligence on Weapons of Mass Destruction*, p. 145.
61. For more about the course, its content, background and rationale, see Michael S Goodman and David Omand, 'What Analysts Need to Understand: The King's Intelligence Studies Program', *Studies in Intelligence* (Vol. 52, No. 4, 2008), pp. 39–50.
62. See European Funding Guide, 'Erasmus – Having Your Credits Recognised', <http://www.european-funding-guide.eu/articles/financing-tips/erasmus-having-your-credits-recognised>, accessed 8 July 2018.
63. See Kristian Gustafson, 'Strategic Horizons: Futures Forecasting and the British Intelligence Community', *Intelligence and National Security* (Vol. 25, No. 5, 2010), pp. 589–610.

years, specialised and structured techniques for finding out about the world of adversaries have been developed by intelligence analysts. These techniques are applied daily to help distinguish the important from the merely urgent, the significant from the eye-catching, and the true from the false and deceptive.[64]

Today, given the data deluge from the internet and social media, such disciplined ways of thinking and structured analytic techniques become ever-more important to customers ranging from members of the National Security Council and their policy staffs to military and police commanders. The need for strong links with developments outside the secret world is apparent in such areas as cognitive and behavioural studies, social psychology, data science and AI, political science, international law and cyber norms, and not least regional and country studies. Modern assessment helps to transform the decision-maker's ignorance about an uncertain future, providing assessments that are more easily intelligible for those officials tasked with making decisions about how to manage and mitigate national security threats.[65]

There are already several different initiatives within the British intelligence community to improve analytical tradecraft in the face of changing demands for analytic products and the pressures of managing the diverse threats identified in the NSS. The momentum behind these initiatives is spreading too, and other parts of the government, including the law enforcement community, are also trying to keep apace and introduce more effective and concerted analytical training.

The problem the authors identify is that there is presently insufficient consistency between these disparate efforts. There is effectively no quality control or a centrally coordinated process of benchmarking and diffusion of best practice. Efforts are currently scattered and the sources of outside accreditation and standards are dispersed between different organisations, even though the professions are increasingly linked. Put simply, there is as yet no coherent strategic view regarding the future of the profession (nationally or transnationally). Without this integral strategic foundation for their profession, it is harder than it should be for the analysts of today and tomorrow to share experiences across departmental lines or with close allies and partners. A more joined-up approach to professionalising intelligence assessment would not only represent value for money, but it would also create a more robust platform for future progress.

There are other reasons to consider a break with the traditional departmental approach to training new analysts. First, the success of this approach often depends on the continuing availability within particular departments of a cadre of appropriately experienced and sufficiently trained mentors, and a sustainable ratio between each department's new recruits and its more experienced analysts and small groups of full-time training staff. This approach is therefore vulnerable to demographic changes in the analytical profession: it would be placed under strain were a particular department to experience either a precipitous reduction in the number of experienced analysts, and/or a significant spike in the number of new entrant analysts.[66] Departmental primacy leaves analytic training subject to competing departmental priorities, for example if a department needs to reallocate a finite training budget to cope with a surge in new entrant case officers or investigators.

A further shortcoming in the traditional, uncoordinated and stove-piped departmental approach is in fact the reverse side of its greatest strength: in this system, new entrants benefit from the received wisdom of experienced practitioners, but the transfer of knowledge from current to new practitioners within one departmental silo risks the perpetuation of 'groupthink', entrenchment of outmoded methods, and a missed opportunity to build on the current professionalisation agenda to create a truly cross-governmental cohort of analysts for whom agile deployment between agencies and departments becomes the norm over the course of their careers.

A sharper sense of professional identity, greater agility and resilience, future-proofing and openness to new learning and techniques would all flow from the adoption of a genuinely cross-governmental approach to the training and education of UK intelligence analysts. Such a move would be a

64. For a more critical perspective on the value of structured analytical techniques, see Welton Chang et al., 'Restructuring Structured Analytic Techniques in Intelligence', *Intelligence and National Security* (Vol. 33, No. 3, 2018), pp. 337–56.

65. Erik J Dahl, *Intelligence and Surprise Attack: Failure and Success from Pearl Harbor to 9/11 and Beyond* (Washington, DC: Georgetown University Press, 2014).

66. This is similar to the problem identified in the USIC during the mid-2000s associated with a demographic imbalance between numbers of older and younger analysts (a 'grey–green' age distribution), and the likely adverse impact of this imbalance on existing models of analytic training. See Gregory F Treverton, 'Foreword', in Johnston, *Analytic Culture in the US Intelligence Community,* p. xii.

prudent step for the community as a whole, not simply because it aligns with the implicit rationale of the Fusion Doctrine, but because it enables the *pre-emptive* development of a shared central resource, before the community begins to experience any problems associated with 'grey–green' demographic shifts, reliance on dated methodologies, or (most sobering of all) the sudden need to demonstrate to politicians and the public its commitment to analytical training and career development following some future crisis of perceived intelligence failure, and the inquiry that would surely follow.

What might this alternative future look like? In one scenario, a cohort of 20 new analysts join the Junior Analyst Course at the Queen Elizabeth II School of Intelligence Assessment twice per year, before going on to their respective units; in addition, 15 more senior analysts will take part in a month-long managerial course to prepare themselves for becoming head of an analytical team. Elsewhere on the campus, an international cadre primarily made up of European allies will be participating in a six-week scenario-planning exercise on the future of terrorism.

If the UK is to successfully execute its existing and future national security strategies, its executive actors and decision-makers must be well informed and apprised of unpredictable, high-impact developments. The existence of a flourishing professional intelligence assessment community, making sense of the world to support key decisions, is surely an indispensable step in this direction. ■

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